



Communicable Disease and Epidemiology News

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Methicillin-Resistant *Staph aureus* (MRSA) in the News

Recently there has been increased awareness of MRSA, due in part to a study published in JAMA. The study summarized invasive MRSA infections in 9 locations in the US (none in Washington State) during 2004-05.¹ In the study, about 85% of all invasive MRSA infections were associated with healthcare, and of those, about two-thirds occurred outside of the hospital, while about one-third occurred during hospitalization. Around 14% of all the infections were community-associated MRSA (or CA-MRSA), meaning that they were in persons without obvious exposures to healthcare. Rates of CA-MRSA varied among the study communities from 1.6 to 29.7 per 100,000. Public Health issued a Health Update on MRSA to King County health care professionals on October 19, 2007, available online at: www.metrokc.gov/health/prevcont/mrsa.htm.

Most cases of MRSA are treatable skin infections that heal with proper wound care, sometimes without requiring antibiotics. Although MRSA can cause severe infections among previously healthy people in the community, this is relatively rare. It is also uncommon for severe infections to spread to others if appropriate precautions are taken. Even in severe cases, most patients respond to antibiotics.

Public Health recommends that health care professionals:

- Consider MRSA infection in patients with community-acquired skin and soft tissue infections (SSTI) and in patients with invasive disease compatible with *S. aureus* infection (i.e., sepsis syndrome, pneumonia, pyomyositis, bone and joint infections).
- Obtain bacterial cultures and antimicrobial sensitivity testing of SSTI's.
- Include coverage for MRSA in the empiric treatment of suspected severe and invasive *S. aureus* infections until results of culture and susceptibility testing are available.
- Consider empiric treatment active against MRSA for non-severe infections in outpatients requiring antibiotic therapy, particularly in settings where MRSA is frequent:
 - Consider trimethoprim-sulfamethoxazole, doxycycline, or clindamycin for empiric outpatient treatment of SSTIs.

- Beta-lactams, fluoroquinolones and macrolides are **not recommended** for empiric treatment of MRSA infections.
- Incision and drainage (I & D) of abscesses should be done whenever possible. For mild uncomplicated abscesses, local wound care including I & D without antibiotic use is a reasonable treatment option.
- Encourage influenza vaccination to decrease the risk for post-influenza MRSA pneumonia.
- Report outbreaks of person-to-person transmission of MRSA to Public Health at (206) 296-4774. Individual cases of MRSA are not notifiable.

See references below for important additional information on treatment, laboratory testing and infection control measures for CA-MRSA.

For more information online, see:

- Interim Guidelines for Evaluation & Management of CA-MRSA SSTI in Outpatient Settings at: www.metrokc.gov/health/providers/epidemiology/MRSA-guidelines.pdf
- CDC: Strategies for Clinical Management of MRSA in the Community, at: www.cdc.gov/ncidod/dhqp/pdf/ar/CAMRSA_ExpMtgStrateies.pdf
- Public Health: MRSA resources including a fact sheet for patients, schools, child care programs, businesses and health care providers available at: www.metrokc.gov/health/prevcont/mrsa.htm

¹Journal of the American Medical Association 2007;298(15):1763-1771

New Hepatitis A Vaccine Guidelines for Post-Exposure Prophylaxis and Pre-Travel Use

At the June 2007 meeting, the Advisory Committee on Immunization Practices (ACIP) approved provisional recommendations for the use of single antigen hepatitis A vaccine for pre-travel use and post-exposure prophylaxis (PEP). Previously, immune globulin (IG) was the mainstay for PEP. In the new recommendations, vaccine is preferred to IG for PEP in certain situations. Full text of the ACIP recommendations is in the October 19, 2007 MMWR.²

Since hepatitis A vaccine was licensed in 1995, the incidence of reported hepatitis A cases has declined by 88% nationally. However, cases continue to occur both among children and adults, particularly those who travel outside the US. Of the 34 cases that were reported in King County in

2005 and 2006, 21 (62%) had a history of international travel. Consequently, the need for pre-exposure and post-exposure prophylaxis remains. Exposure to the virus from an infected food handler is another common indication for PEP.

Post-Exposure Prophylaxis for Hepatitis A:

- Age 12 months to 40 years: vaccine is preferred to immune globulin (IG). Administer as soon as possible.
- Age 40 years and older: IG (0.02 mL/kg) is preferred, since information regarding vaccine efficacy is not available and disease is often more serious in adults. However, vaccine can be used if IG cannot be obtained.
- Children < 12 months of age, or persons who are immunocompromised, have chronic liver disease, or for whom vaccine is contraindicated: IG (0.02 mL/kg).
- When both IG and vaccine are recommended, they should be given simultaneously. The second dose of vaccine should be given 6-12 months after the first dose.
- The efficacy of giving IG or vaccine > 2 weeks after exposure has not been established.

Hepatitis A Vaccine for Travelers:

- For travelers departing in >2 weeks: Vaccine only.
- For healthy travelers age 1 through 40 years old departing in ≤2 weeks: Vaccine only.
- For older adults, immunocompromised persons, and persons with chronic liver disease or other chronic medical conditions: IG (0.02 mL/kg) simultaneously with vaccine for optimal protection.
- For infants age <12 months, anyone allergic to vaccine components or those who elect not to receive vaccine: IG (0.02 mL/kg) only.

Cases of hepatitis A infection should be reported immediately upon suspicion to Public Health at

(206) 296-4774 to assure timely administration of PEP to exposed contacts, when indicated.

West Nile Virus (WNV) Monthly Update

In 2007, there have been no reported human cases of locally-acquired West Nile Virus (WNV) disease in Washington State. Nine animals, including eight horses, one dog and one bird tested positive, all from Yakima County; there were no WNV-positive mosquito pools identified. Two King County residents were reported with West Nile fever from exposures outside of Washington State. Nationally as of November 19, 2007, 3,304 cases of human WNV disease have been reported to CDC in 2007, including 1,082 cases (33%) of neuroinvasive disease and 93 fatalities. The most recent WNV summary is available in the October 19, 2007 MMWR.²

² Oct 19, 2007 MMWR online at www.cdc.gov/mmwr/weekcvol.html

Disease Reporting
AIDS/HIV.....(206) 296-4645
STDs.....(206) 744-3954
TB(206) 744-4579
All Other Notifiable Communicable Diseases (24 hours a day).....(206) 296-4774
Automated reporting line for conditions not immediately notifiable.....(206) 296-4782

Hotlines
Communicable Disease.....(206) 296-4949
HIV/STD.....(206) 205-STD5

Public Health-Seattle & King County Online Resources
Home Page: www.metrokc.gov/health/
The EPI-LOG: www.metrokc.gov/health/providers
Communicable Disease listserv (PHSKC INFO-X) at: mailman.u.washington.edu/mailman/listinfo/phskc-info-x

Influenza Surveillance Updates:
www.metrokc.gov/health/immunization/fluactivity.htm

Reported Cases of Selected Diseases, Seattle & King County 2007				
	Cases Reported in October		Cases Reported Through October	
	2007	2006	2007	2006
Campylobacteriosis	21	22	209	226
Cryptosporidiosis	2	7	38	36
Chlamydial infections	565	368	4772	4270
Enterohemorrhagic <i>E. coli</i> (non-O157)	0	0	5	2
<i>E. coli</i> O157: H7	4	2	37	35
Giardiasis	16	13	127	100
Gonorrhea	105	148	1257	1637
<i>Haemophilus influenzae</i> (cases <6 years of age)	0	0	2	3
Hepatitis A	6	5	16	16
Hepatitis B (acute)	0	2	20	12
Hepatitis B (chronic)	52*	73	680	707
Hepatitis C (acute)	0	0	5	6
Hepatitis C (chronic, confirmed/probable)	109*	144	1112	1283
Hepatitis C (chronic, possible)	30*	13	276	217
Herpes, genital (primary)	57	29	531	651
HIV and AIDS (including simultaneous diagnoses with AIDS)	37	29	306	223
Measles	0	0	1	0
Meningococcal Disease	0	2	5	9
Mumps	0	0	4	2
Pertussis	8	4	69	94
Rubella	0	0	0	0
Rubella, congenital	0	0	0	0
Salmonellosis	20	31	215	177
Shigellosis	3	7	47	47
Syphilis	16	12	132	176
Syphilis, congenital	0	0	0	0
Syphilis, late	6	10	58	65
Tuberculosis	14	7	126	119

*Due to reporting and counting delays, the number of cases may not reflect the actual case burden for the month.

The *EPI-LOG* is available in alternate formats upon request.